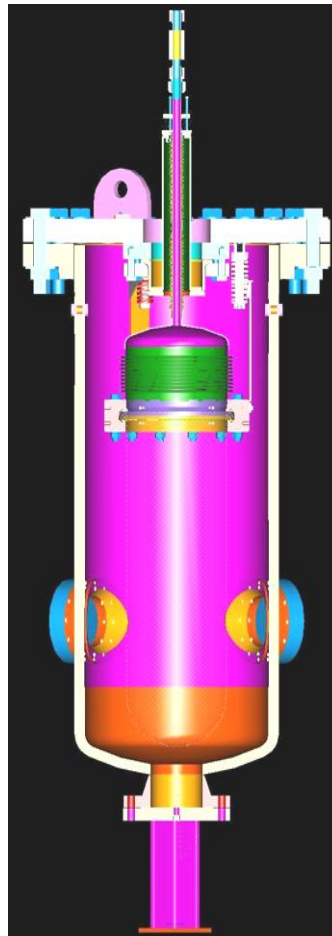
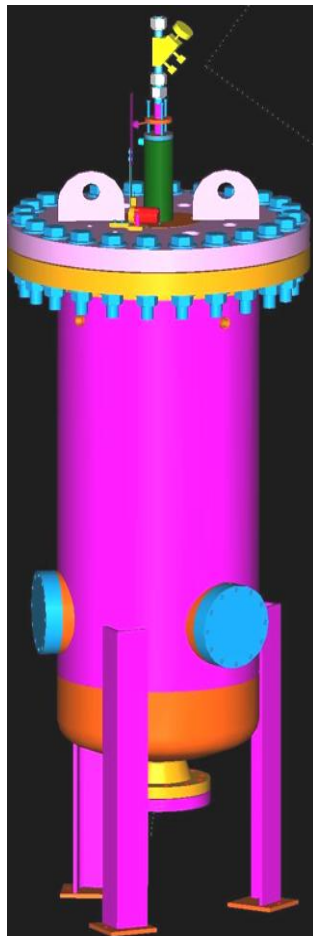


Safety Review & Operational Documents

E-961: COUPP

60kg Bubble Chamber



Safety Review & Operational Documents For COUPP E-961: 60 kg Bubble Chamber System

Table of contents & Index to COUPP Document Database

{ Go to website below, type **COUPP document number** in the COUPP-doc# box }

<http://coupp-docdb.fnal.gov/cgi-bin/DocumentDatabase/>

1. pORC for unattended Operation of 60 kg Bubble chamber
(Integrated with the water system) in DZero Assembly Building, 30-July 2009
COUPP-doc-188
2. Bubble chamber system
 - a. pORC for unattended operation at PAB (without water system), 01-July-2008
COUPP-doc-187
 - b. General description of operation **COUPP-doc-187**
 - c. Design presentation **COUPP-doc-187**
3. Water system
 - a. pORC for unattended operation at DAB (without bubble chamber),
04-Mar-2009 **COUPP-doc-119**
 - b. Purpose and description **COUPP-doc-119**
 - c. Picture and manufacturer drawings of tank **COUPP-doc-119**
4. Assembly drawings
 - a. Pictures of Equipment at DZero Assembly Building **COUPP-doc-189**

- b. Equipment layout in MINOS access tunnel FNAL#9213.400-ME-466643

COUPP-doc-190

- c. Pressure vessel assembly drawing FNAL#9219.400-ME-466193

COUPP-doc-190

- d. Pressure vessel re-work drawing FNAL#9213.400-ME-444753

COUPP-doc-190

- e. Inner bubble chamber assembly FNAL#9213.400-ME-466178

COUPP-doc-190

- f. Expansion chamber weldment FNAL#9213.400-ME-466185

COUPP-doc-190

5. Control system

- a. System Description **COUPP-doc-67**

- b. Fluid Operating states **COUPP-doc-136**

- c. Instrument and Controls wiring drawing FNAL#9213.400-ME-444932

COUPP-doc-67

- d. Tag Database and Variable list **COUPP-doc-67**

- e. C-MORE graphic user interface pages **COUPP-doc-67**

6. Process system

- a. Flow diagram (PID) drawing FNAL #9219.000-MD-444682

COUPP-doc-137

- b. Valve components list **COUPP-doc-137**

- c. Instrumentation components list **COUPP-doc-137**

- d. Operational flow & valve configurations **COUPP-doc-194**

7. Failure Mode and Effects Analysis (FMEA) **COUPP-doc-192**

8. “What-If” analysis **COUPP-doc-192**
9. ODH & CF3I Safety Analysis **COUPP-doc-182**
10. Job Hazard Analysis **COUPP-doc-193**
11. Pressure Vessel Engineering notes **COUPP-doc-117**
 - a. Pressure control tank – vessel # PPD-10109
 - b. Glycol bladder tank – vessel # PPD-10110
 - c. Outer vessel – vessel # PPD-10111
12. Piping Engineering note **COUPP-doc-83**
13. Other information
 - a. Weights and sizes of components **COUPP-doc-114**
 - b. Propylene glycol fluid properties and Material Safety Data Sheet (MSDS)
COUPP-doc-161 and COUPP-doc-116
 - c. CF3I fluid property and Material Safety Data Sheet (MSDS)
COUPP-doc-104 and COUPP-doc-103 and COUPP-doc-116
 - d. COUPP contact list that is posted at experiment **COUPP-doc-116**